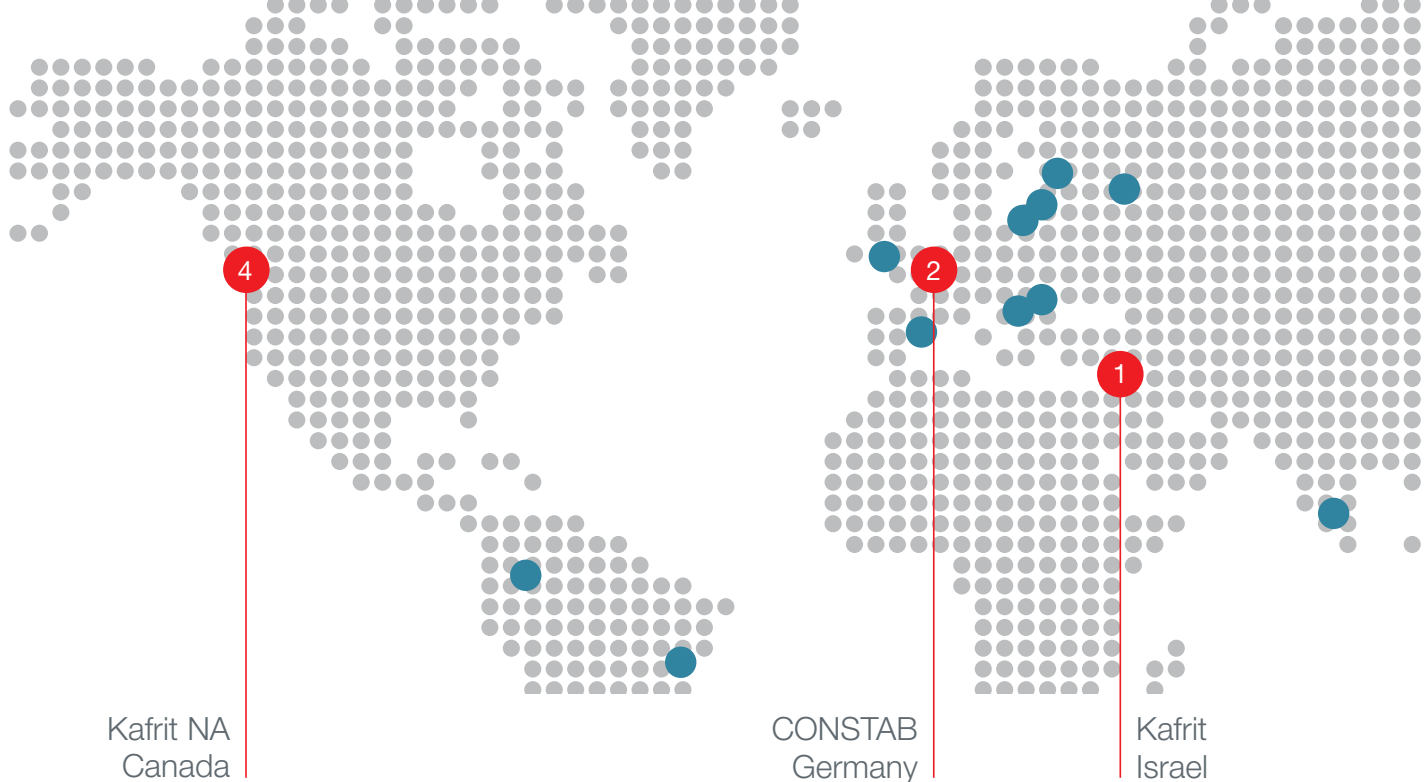


Flame Retardants

Enlightening Solutions with Kafrit
Masterbatches and Compounds



Giving Life to **Plastic**



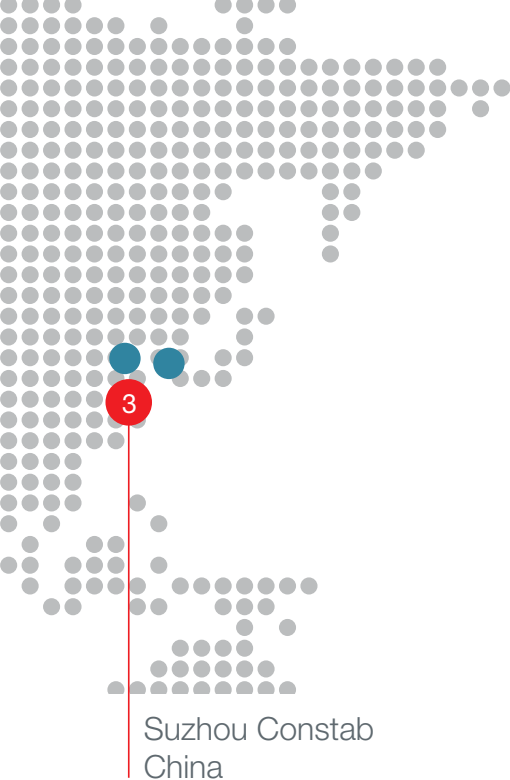
Defining new production goals: Experience the new high performance products.

Kafrit Group is a leading producer of Masterbatches and Compounds for the plastics industry and currently employs more than 400 people. In 2015, the Group achieved a 191 million \$ turnover with an available capacity of more than 82,000 MT. Moreover, the company is active on a global scale and has set up production sites all over the world. All of this began in 1973 when the company was founded in Israel. Since then, the company has grown primarily via acquisition.

Today, the Kafrit Group incorporates Kafrit Industries (1993) Ltd. in Israel, CONSTAB Polyolefin Additives GmbH in Germany, China's Suzhou Constab Engineering Plastics Co. LTD and the Canada-based Kafrit NA Ltd.. With more than 44 years of experience in the plastics processing industry, the company can draw on high levels of expertise and technical know-how. Kafrit Group places a high value on sustainability and has made it to one of the cornerstones of our corporate strategy. Our unbridled dedication to environmental, social and financial issues makes us to one of the leading business partners in the plastics industry. Our customers value our passion and appreciate our ecological awareness and social commitment. Moreover, they recognize our world leading services and consider our products as among the best within our industry.

We develop and produce cost-efficient solutions which will enhance the completion of high-quality end products in many areas of the plastics industry, such as packaging films (BOPP, CPP, PE), PC sheet, agricultural films and derivatives, biopolymers, flame retardant applications, PEX pipes, fibers and nonwovens. Along with many other products, the Kafrit group supplies the following Masterbatches and Compounds:

- Acid Scavengers
- Antiblock
- Antifog
- Antimicrobial Agents
- Antislip
- Antistatic
- Color Concentrates
- Flame Retardants
- Fillers
- Foaming Agents
- IR Absorbers
- Light Stabilizers
- Lubricants
- Matting Agents
- Metal Deactivators
- Nucleating Agents
- Optical Brighteners
- Processing Aids
- Purge Agents
- Release Agents
- Slip Agents
- UV Absorbers
- UV Blockers
- White Masterbatches



Suzhou Constab
China

- Kafrit production sites
- Agencies/Distribution

Research that takes us to the top

Throughout our company history, research and development have always been a key area of our expertise. Kafrit employs a staff of more than 400 people that work on innovative products and make use of our vast pool of knowledge that we developed in our 44 years of experience in the plastics industry. Our experts optimize and develop additive concentrates, flame retardants, color concentrates and compounds for various applications. Kafrit enjoys a close partnership with renowned research institutions at the Shenkar University in Israel and at different universities in Germany. Moreover, we maintain a strong co-operation with well-known suppliers including machine manufacturers who recommend our products for use in combination with their machines.



Our vision:

We aim to be the preferred technological partner of the plastics industry by continually supplying our global customers with innovative and high quality solutions that are fitted to their specific needs.

Our tailor-made solutions – exceeding your expectations.

Check CONSTAB's latest Zero-Halogen Flame Retardant Masterbatches:

- Unique performance in thin wall application, e.g. films
- Applicable in sheets, pipes and others
- Suitable for translucent to transparent articles
- Excellent UV stability

New Zero-Halogen Flame Retardant Masterbatches open new market opportunities:

- High efficiency
- Low dosing levels
- Good optical properties
- High UV light resistance


CONSTAB's new Zero-Halogen Flame Retardants are performing in an exceptional large range of applications, for example in:

- Covering films
- Hoods
- Greenhouse films
- Air bubble films
- and many more

Further advantages are:

- Easy processing in many articles made from polyolefins
- Suitable as replacement of existing systems as well as for new market opportunities
- Dedicated grades for various fire standards provide optimum performance

Our products are performing where conventional systems fail.



"Kafrit takes full responsibility for their products, keep to their word on delivery and lead time and have an excellent reputation."

1. Sheets and Profiles

1.1 For foamed parts

1.1.1 Polyolefins

Code	Description	Dosing %
FR 0B041 LD	Chlorinated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1, B2, EN 13501-1	4.0 – 10.0
FR 07167 LD	Chlorinated FR masterbatch FMVSS 302, DIN 4101 B1, B2 resp. EN 13501-1 Euroclass E	4.0 – 25.0
FR 0J000 LD	Brominated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 , B2, EN 13501-1	8.0 – 25.0
FR 0244A PP	Brominated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1, B2, EN 13501-1	2.0 – 10.0
ZHFR 00T82 PP	Zero Halogen FR masterbatch Zero-Halogen flame retardant DIN 4102-1 B2, EN 13501-1	5.0 – 15.0

1.1.2 Polystyrene

Code	Description	Dosing %
FR 00R58A PS	Polymeric Brominated FR masterbatch DIN 4102 B1, B2. Suitable for flame retarding foamed PS (XPS). Based on Polymeric FR, which does not bloom	2.0 – 7.0
FR 00U54 PS	Brominated FR masterbatch DIN 4102 B1, B2 based on Brominated FR, non HBCD. Suitable for foamed PS (XPS)	2.0 – 5.0

1.2 PET

Code	Description	Dosing %
HFFR 0561A PBT NEW!	Halogen-free FR masterbatch PET foam, DIN 4102 B1, B2	5.0 – 20.0

1.3 For solid parts

Code	Description	Dosing %
FR 07062 LD	Brominated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1 Euroclass E	4.0 – 25.0
FR 0D200 LL	Brominated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1	3.0 – 10.0
FR 0244A PP	Brominated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1	3.0 – 10.0
FR 00U77 ABS	Brominated FR masterbatch UL94 5V, V0	18.0 – 30.0
HFFR 00T84 PP NEW!	Halogen-free FR masterbatch According to DIN 57472 part 815 (< 1000 ppm Halogens), UL94, DIN 4102 B1, B2, EN 13501-1. Suitable for injection molding and extrusion	20.0 – 40.0
HFFR 00S15 LD NEW!	Halogen-free FR masterbatch According to DIN 57472 part 815 (< 1000 ppm Halogens), UL94, DIN 4102 etc. Suitable for injection molding and extrusion	20.0 – 40.0
HFFR 00J08 PP NEW!	Halogen-free FR masterbatch According to DIN 57472 part 815 (< 1000 ppm Halogens), Suitable for PP applications, UL94 V2, EN50086, LPS-1207	4.0 – 15.0
HFFR 00U89 PP	Halogen-free FR masterbatch < 2000 ppm Halogen. Suitable for PP applications, UL94 V2, EN50086, LPS-1207	3.0 – 9.0

1.4 For Multi-wall parts

Code	Description	Dosing %
FR 07062 LD	Brominated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1 Euroclass E	4.0 – 25.0
FR 0D200 LL	Brominated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1	3.0 – 8.0

2. Film

2.1 Bubble film

Code	Description	Dosing %
FR 07062 LD	Brominated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1 Euroclass E	4.0 – 25.0

2.2 Industrial film

Code	Description	Dosing %
FR 07167 LD	Chlorinated FR masterbatch FMVSS 302, DIN 4101 B1 and B2 resp. EN 13501-1 Euroclass E	4.0 – 25.0
FR 0B041 LD	Chlorinated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1	4.0 – 10.0
FR 0C390 LD	Brominated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1 Euroclass E Suitable for injection molding and extrusion	3.5 – 20.0
FR 07049 LD	Brominated FR masterbatch, high thermal stability LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1 Euroclass E	5.0 – 25.0
FR 07062 LD	Brominated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1 Euroclass E	4.0 – 25.0
HFFR 0K580 LL	Halogen-free FR masterbatch FMVSS 302, UL94, DIN 4102 B2, EN 13501-1 Euroclass E	2.0 – 5.0
ZHFR 07158 LD NEW!	Zero Halogen FR masterbatch Zero-halogen flame retardant masterbatch with a temperature stability up to 200°C for transparent applications. FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1 Euroclass E	4.0 – 20.0
ZHFR 07175 LD NEW!	Zero Halogen FR masterbatch Zero-halogen flame retardant masterbatch with a temperature stability up to 235°C for transparent outdoor applications. FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1 Euroclass E	4.0 – 20.0
ZHFR 07169 LD NEW!	Zero Halogen FR masterbatch Provides flame retardancy according to NF P 92-503 and NF P 92-504 for classification M2 to M4	8.0 – 14.0
ZHFR 07179 UNI NEW!	Zero Halogen FR masterbatch NF P 92-503 including NF P 92-504, NF P 92-505 for classification M1 to M4	10.0 – 18.0

3. Pipes

3.1 Pipes

Code	Description	Dosing %
FR 00R50 LD	Chlorinated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1, EN 50086	5.0 – 10.0
FR 07062 LD	Brominated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1 Euroclass E, EN 50086	4.0 – 25.0
FR 0D200 LL	Brominated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1 Available in a variety of colors: grey, black, blue, red, green, etc.	1.0 – 6.0
FR 0C390 LD	Brominated FR masterbatch LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1 Euroclass E, EN 50086	4.0 – 25.0
HFFR 00S15 LD	Halogen-free FR masterbatch According to DIN 57472 part 815 (<1000 ppm Halogens) LPS1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1 Euroclass E, EN 50086	20.0 – 40.0
HFFR 00242 PP	Halogen-free FR masterbatch FMVSS 302, UL94, DIN 4102 B2, EN 13501-1 Euroclass E	2.0 – 5.0
FR 102930 LL WHITE and FR	FR + UV + Color Combi-batch For long outdoor exposure. Also available in black. LPS 1207, FMVSS 302, UL94, DIN 4102 B1 and B2, EN 13501-1	8.0 – 14.0

4. Fibers

4.1 PP

Code	Description	Dosing %
FR 0H120 PP	Brominated FR masterbatch NFPA 701, FMVSS 302, DIN 4102, UL94 Suitable for thin-walled parts and non-wovens	3.0 – 6.0
HFFR 00242 PP	Halogen-free FR masterbatch FMVSS 302, UL94, DIN 4102 B2, EN 13501-1 Euroclass E	2.0 – 5.0

4.2 PET

Code	Description	Dosing %
HFFR 05610 PBT	Halogen-free FR masterbatch DIN 4102 B1, B2, French M1, M2	5.0 – 20.0

5. Injection Molding

5.1 Technical Parts

Code	Description	Dosing %
FR 00P90 PC NEW!	Transparent Halogen-free FR masterbatch UL-94 V0 1.6, 3.2 mm Suitable for injection molding and extruded parts	10.0 – 30.0
FR 04530 PC	Halogen-free FR masterbatch UL-94 V0 1.6, 3.2 mm Suitable for injection molding and extruded parts	3.0 – 5.0
FR 10A18C PC WHITE & UV	Halogen-free FR compound with UV protection UL94 V0, 3.2 mm Available in a variety of colors	100 % compound
HFFR 00S15 LD	Halogen-free FR masterbatch According to DIN 57472 part 815 (<1000 ppm Halogens) UL94, DIN 4102 etc. Suitable for injection molding and extruded parts	20.0 – 40.0
FR 0I980 PP HFFR	Halogen-free FR masterbatch UL94 V2, 1.6 mm	3.0 – 5.0
HFFR 90856 PP BLACK	Halogen-free FR compound UL 2043 For Heat Release Rate (HRR) and smoke suppression. Available in other colors	100 % compound

Our Values:

Technology: We continue to rely on advanced know-how and technologies, securing our future.

Quality: We warrant our products are produced under strict and advanced quality assurance guidelines.

Safety: We ensure our employees always follow safety procedures.

Environment: We are committed to complying with environmental regulations and promoting environmental responsibilities.

Employees: We value the different ideas, experiences and backgrounds of our employees.

Leadership: We lead by example. We coach, educate and guide our workforce enabling them to achieve their full potential.

Empowerment: We encourage our employees to be innovative, make decisions and take responsibility for their actions.

Teamwork: We strive to work as a team and individuals, reaching our common goals.

Continuous Improvement: We are constantly striving to do the right things even better.

Ethics: We are fair, truthful, and consistent in our business and personal practices



Global supply, local partnership:
We are where you are.

KafritGroup

Kafrit

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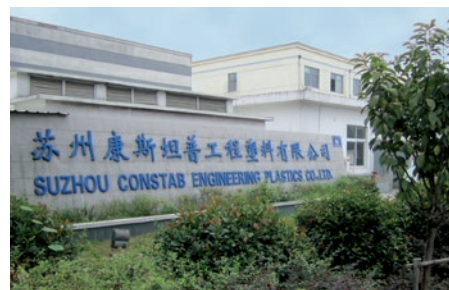
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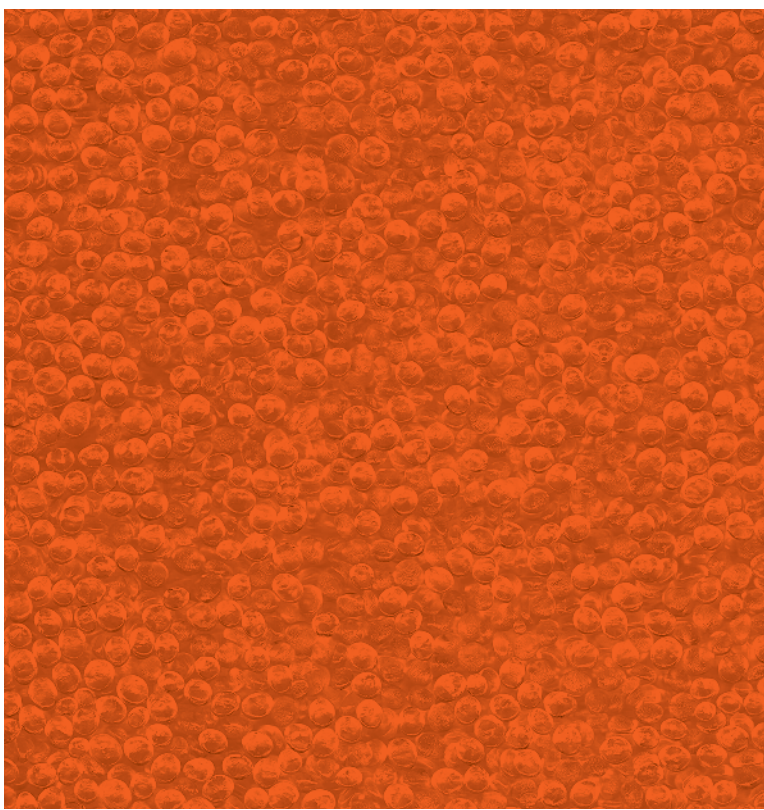
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Please request for further information:

- **Injection Molding**
Injecting new ideas into your products with
CONSTAB Masterbatches and Compounds
 - **Blow Molding**
Forging Success with innovative
CONSTAB Masterbatches and Compounds
 - **Packaging your needs** with Kafrit Group
Masterbatch and Compounds
 - **Polycarbonate Sheets**
for a transparent view with Kafrit Masterbatches
and Compounds
 - **Agricultural Film**
Growing Success with Kafrit Group
Masterbatches and Compounds
 - **Optimizing BOPP film production**
with CONSTAB Masterbatches and
Compounds
 - **Adding value to Nonwovens**
with CONSTAB Masterbatches
- 

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Giving Life to **Plastic**